

## CLAIMS

I claim:

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1. A method of preventing perceivable artifacts from being formed in a composite image comprising the steps of:

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imaging a plurality of printing plates using an imaging apparatus having a plurality of imaging beams, said plurality of printing plates used for a same print job; and

using a different imaging beam of said imaging apparatus as a starting beam to image each of said plurality of printing plates.

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2. The method of claim 1 wherein said artifacts are periodic.

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3. The method of claim 1 further comprising the step of selecting said different imaging beam using a random process.

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4. The method of claim 1 further comprising the step of selecting said different imaging beam using a pseudo-random process.

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5. The method of claim 1 further comprising the step of selecting said different imaging beam using a sequential process.

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6. The method of claim 1 further comprising the step of selecting said different imaging beam using a fixed or variable offset.

7. A method of reducing perceivable artifacts in a composite image comprising the steps of:

imaging a plurality of printing plates using an imaging apparatus having a plurality of  
imaging beams, said plurality of printing plates used for a same print job; and

using a different imaging beam of said imaging apparatus as a starting beam to image  
each of said plurality of printing plates.

8. The method of claim 7 further comprising the step of selecting said different imaging beam  
using a random process.

9. The method of claim 7 further comprising the step of selecting said different imaging beam  
using a pseudo-random process.

10. The method of claim 7 further comprising the step of selecting said different imaging beam  
using a sequential process.

11. The method of claim 7 further comprising the step of selecting said different imaging beam  
using a fixed or variable offset.

12. A method of preventing perceivable artifacts from being formed in a printed image comprising the steps of:

imaging a plurality of printing plates using an imaging apparatus having a plurality of imaging beams, said plurality of printing plates used for a same print job;

using a unique set of said plurality of imaging beams to image each of said plurality of printing plates; and

wherein each of said printing plates is operative to transfer a unique color of ink from an ink supply to a same substrate, when said plurality of printing plates are used on a multi-color printing press.

13. The method of claim 12 wherein said artifacts are periodic.

14. The method of claim 12 further comprising the step of selecting said unique set of said plurality of imaging beams using a random process.

15. The method of claim 12 further comprising the step of selecting said unique set of said plurality of imaging beams using a pseudo-random process.

16. The method of claim 12 further comprising the step of selecting said unique set of said plurality of imaging beams using a sequential process.

17. The method of claim 12 further comprising the step of selecting said unique set of said plurality of imaging beams using a fixed or variable offset.

18. A method of preventing perceivable artifacts from being formed in an image that is produced using a multi-color printing press comprising the steps of:

imaging a plurality of printing plates using an imaging apparatus having a plurality of  
imaging beams, said plurality of printing plates used for a same print job;

using a different imaging beam of said imaging apparatus as a starting beam to image  
each of said plurality of printing plates; and

wherein each of said printing plates is operative to transfer a unique color of ink from an  
ink supply to a same substrate when each of said printing plates is used on said multi-  
color printing press.

19. The method of claim 18 wherein said artifacts are periodic.

20. The method of claim 18 further comprising the step of selecting said different imaging beam  
using a random process.

21. The method of claim 18 further comprising the step of selecting said different imaging beam  
using a pseudo-random process.

22. The method of claim 18 further comprising the step of selecting said different imaging beam  
using a sequential process.

23. The method of claim 18 further comprising the step of selecting said different imaging beam  
using a fixed or variable offset.

24. A method of reducing perceivable artifacts in an image that is produced using a multi-color printing press comprising the steps of:

imaging a plurality of printing plates using an imaging apparatus having a plurality of  
imaging beams, said plurality of printing plates used for a same print job;

using a different set of imaging beams of said imaging apparatus to image each of said  
plurality of printing plates; and

wherein each of said printing plates is operative to transfer a unique color of ink from a  
ink supply to a same substrate when each of said printing plates is used on said multi-  
color printing press.

25. The method of claim 24 further comprising the step of selecting said different set of imaging  
beams of said imaging apparatus using a random process.

26. The method of claim 24 further comprising the step of selecting said different set of imaging  
beams of said imaging apparatus using a pseudo-random process.

27. The method of claim 24 further comprising the step of selecting said different set of imaging  
beams of said imaging apparatus using a sequential process.

28. The method of claim 24 further comprising the step of selecting said different set of imaging  
beams of said imaging apparatus using a fixed or variable offset.

29. A method of imaging a plurality of printing plates comprising the steps of:

providing a plurality of printing plates, wherein each printing plate is designated for use with a unique color plane for a same print job;

imaging each of said plurality of printing plates with an imaging system having a plurality of imaging beams; and

wherein a unique set of said plurality of imaging beams is used to image each of said plurality of printing plates.

30. The method of claim 29 further comprising the step of selecting said unique set of said plurality of imaging beams using a random process.

31. The method of claim 29 further comprising the step of selecting said unique set of said plurality of imaging beams using a pseudo-random process.

32. The method of claim 29 further comprising the step of selecting said unique set of said plurality of imaging beams using a sequential process.

33. The method of claim 29 further comprising the step of selecting said unique set of said plurality of imaging beams using a fixed or variable offset.

34. A method of printing images on a substrate comprising the steps of:

providing a plurality of imaged printing plates for use on a printing press for a same print job;

transferring an image from each of said plurality of printing plates to a same printable substrate;

wherein each of said plurality of printing plates is used with a different color plane on said printing press; and

wherein each of said plurality of printing plates is previously imaged using a multi-beam imaging machine, and wherein each of said plurality of printing plates is imaged using a different starting beam on said multi-beam imaging machine.

35. The method of claim 34 further comprising the step of selecting said different imaging beam using a random process.

36. The method of claim 34 further comprising the step of selecting said different imaging beam using a pseudo-random process.

37. The method of claim 34 further comprising the step of selecting said different imaging beam using a sequential process.

38. The method of claim 34 further comprising the step of selecting said different imaging beam using a fixed or variable offset.

39. A method of obscuring or hiding artifacts in a printed image comprising the steps of:

imaging a plurality of printing plates using an imaging apparatus having a plurality of imaging beams, said plurality of printing plates used for a same print job; and

using a different imaging beam of said imaging apparatus as a starting beam to image each of said plurality of printing plates.

40. The method of claim 39 wherein said artifacts are periodic.

41. The method of claim 39 further comprising the step of selecting said different imaging beam using a random process.

42. The method of claim 39 further comprising the step of selecting said different imaging beam using a pseudo-random process.

43. The method of claim 39 further comprising the step of selecting said different imaging beam using a sequential process.

44. The method of claim 39 further comprising the step of selecting said different imaging beam using a fixed or variable offset.